

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

GUATEMALA

RURAL WATER INVESTMENT PROGRAM

(GU-0150)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Mario Barrios (COF/CGU); Javier Jiménez (LEG), Corinne Cathala, Asunción Galdón, Walter Gómez, Ana María Linares (RE2/EN2); and Christopher Jennings, Project Team Leader (RE2/EN2).

CONTENT

EXECUTIVE SUMMARY	1
I. BACKGROUND	1
A. The potable water and sanitation sector in Guatemala	1
B. Institutional setting	2
C. Current sources of funding for the sector	3
D. UNEPAR's traditional approach to rural water and sanitation projects.....	4
E. Experience in recovering investment costs	6
F. The IDB's involvement in rural water projects in Guatemala	6
G. Lessons learned	7
H. The need for a new approach to rural water and sanitation.....	8
I. IDB Country and Sector Strategy.....	9
II. THE RURAL WATER INVESTMENT PROGRAM.....	10
A. Objectives and description	10
B. Cost and financing.....	12
C. Retroactive recognition of expenses.....	13
III. PROGRAM IMPLEMENTATION	14
A. Principles of implementation.....	14
B. The Borrower and Executing Agency	14
C. The Project Cycle and the Role of the Communities	14
D. Publicity and technical support	16
E. The financial mechanism.....	18
F. Operating regulations	20
G. Program management.....	20
H. The role of INFOM	22
I. Program duration and timetable	22
J. Performance indicators.....	23
K. Revolving fund	23
L. Disbursements	23
M. Records, inspections and reports	23
N. Auditing.....	24
O. Monitoring and evaluation	24
P. Program launch workshop.....	25
Q. Procurement of goods and services	25
R. Conditions precedent to first disbursement	26
S. Special disbursement to initiate Program	26

IV.	VIABILITY AND RISKS	27
A.	Technical considerations	27
B.	Institutional viability	28
C.	Socioeconomic viability	29
D.	Financial considerations	31
E.	Environmental and social impact	32
F.	Beneficiaries	33
G.	Poverty impact.....	33
H.	Public Utilities Policy.....	33
I.	Risks	34

ANNEXES

ANNEX I	Logical Framework
ANNEX II	Procurement Plan

BASIC SOCIOECONOMIC DATA

For basic socioeconomic data, including public debt information, please refer to the following address:

<http://www.iadb.org/RES/index.cfm?fuseaction=externallinks.countrydata>

ABBREVIATIONS

AFP	<i>Agua Fuente de Paz.</i>
BCIE	<i>Banco Centroamericano de Integración Económica</i> , the Central American Bank for Economic Integration.
EMPAGUA	The water department of the Municipality of Guatemala.
FIS	Fondo de Inversión Social, the central government's fund for investment in social projects
IDB	Inter-American Development Bank.
IFF	Intermediate Financing Facility
INFOM	<i>Instituto de Fomento Municipal.</i> The central government's Municipal development institution, also the organization charged with policy and planning for potable water and sanitation.
KfW	<i>Kreditanstalt für Wiederaufbau</i> , the German Development Bank.
OC	Ordinary Capital.
NGO	Non-Government Organization.
PAHO	Pan American Health Organization
PAYSA	<i>Proyecto de Agua Potable y Saneamiento del Altiplano</i> , a potable water and sanitation project for the highlands funded in part by USAID.
Q	Quetzal, the currency of Guatemala. For the purpose of the document, the exchange is taken at US\$1 = Q8
SAS	<i>Sistema Nacional de Información de Agua y Saneamiento.</i> The national database, previously operated by the Ministry of Health, but now maintained by INFOM, which collates information on water and sanitation in rural areas.
SEGEPLAN	<i>Secretaría General de Planificación y Programación.</i> The government unit charged with planning and investment.
UNEPAR	<i>Unidad para la Ejecución de Proyectos de Acueductos Rurales.</i> The unit for the execution of rural water projects. The unit was originally formed as part of the Ministry of Health, but is now a directorate within INFOM.
USAID	United States Agency for International Development.

GLOSSARY AND DEFINITIONS

Association	The association formed by members of the community to be responsible for the water and sanitation services. The Associations will have a legal identity as associations allowing them to formal contracts.
Constructor	A company contracted by an Association to build a Project.
Fiduciary Fund and Fiduciary Bank	A trust fund, and the local commercial bank in which it is established, used to channel funds to the beneficiaries of the Program.
Operating Regulations	The document that defines the manner in which the Program will be implemented. The Operating Regulations give all of the performance indicators, procedures and mechanisms to be used in the Program. The Operating Regulations include all rules for eligibility in the Program and the Operating Regulations for the trust fund. It defines the work of all the actors in the Program and will form one of the base documents that control the work of the Program Manager.
Program	The Rural Water Investment Program, the subject of this report.
Program Manager (<i>Empresa Gerenciadora del Programa</i>)	A private company, specialist in project management, contracted to plan and control the Program. The Program Manager will be responsible for the completion of the Program on schedule, in accordance with the Operating Manual and the budget.
Project	All of the activities related to the promotion, design, construction and putting into operation of potable water and sanitation facilities for an individual community funded under the Program.
Promoters (<i>Empresas Promotoras</i>)	Non-Government Organizations or private companies contracted to provide technical assistance so that communities and Water Associations are able to make informed technical and financial decisions relating to their involvement in the Program. The Promoters will also supervise the construction of the projects on behalf of the Associations.
Publicist	A private company, specialist in the design and implementation of publicity campaigns, contracted to disseminate the Program in a way that ensures that all communities in Guatemala have an equal opportunity of participation.



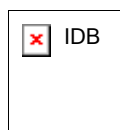
GUATEMALA

IDB LOANS

APPROVED AS OF MAY 31, 2003

	US\$Thousand	Percent
TOTAL APPROVED	2,587,123	
DISBURSED	2,029,605	78.45 %
UNDISBURSED BALANCE	557,519	21.54 %
CANCELATIONS	256,147	9.90 %
PRINCIPAL COLLECTED	816,157	31.54 %
APPROVED BY FUND		
ORDINARY CAPITAL	1,881,508	72.72 %
FUND FOR SPECIAL OPERATIONS	632,137	24.43 %
OTHER FUNDS	73,477	2.84 %
OUTSTANDING DEBT BALANCE	1,213,448	
ORDINARY CAPITAL	816,754	67.30 %
FUND FOR SPECIAL OPERATIONS	390,630	32.19 %
OTHER FUNDS	6,064	0.49 %
APPROVED BY SECTOR		
AGRICULTURE AND FISHERY	185,369	7.16 %
INDUSTRY, TOURISM, SCIENCE AND TECHNOLOGY	222,862	8.61 %
ENERGY	357,878	13.83 %
TRANSPORTATION AND COMMUNICATIONS	440,390	17.02 %
EDUCATION	65,628	2.53 %
HEALTH AND SANITATION	303,291	11.72 %
ENVIRONMENT	64,300	2.48 %
URBAN DEVELOPMENT	227,796	8.80 %
SOCIAL INVESTMENT AND MICROENTERPRISE	250,772	9.69 %
REFORM AND PUBLIC SECTOR MODERNIZATION	467,074	18.05 %
EXPORT FINANCING	1,764	0.06 %
PREINVESTMENT AND OTHER	0	0.00 %

* Net of cancellations with monetary adjustments and export financing loan collections.



Inter-American Development Bank
Regional Operations Support Office
Operational Information Unit

Guatemala

Tentative Lending Program

2003

Project Number	Project Name	IDB US\$ Millions	Status
GU0170	Housing / Population Census	25.0	APPROVED
GU0150	Rural Water Investment Program	50.0	
GU0171	Electric Interconnection between Guatemala and Mexico	37.5	
Total - A : 3 Projects		112.5	
GU0126	Rural Electrification Program	91.0	
Total - B : 1 Projects		91.0	
TOTAL 2003 : 4 Projects		203.5	

2004

Project Number	Project Name	IDB US\$ Millions	Status
GU0143	Modernization of National Congress	12.0	
GU0154	Microcredit Global Program	15.0	
Total - A : 2 Projects		27.0	
GU0173	Local Development and Reconciliation	52.0	
GU0164	National System for Services and Goods Contr.	6.8	
GU0176	Turism for Mundo Maya Circuit	40.0	
GU0157	Pov. Red. Strat Implementation	30.0	
GU0066	Sanitation & Sust.management Amatitlan Basin	21.0	
GU0153	Housing Program	20.0	
GU0163	Citizen Security	30.0	
GU0165	Electoral Supreme Tribunal Modernization	15.0	
GU0177	Justice Program	24.0	
GU0178	Modernization and Strengthening of Comptrollers Office	19.0	
Total - B : 10 Projects		257.8	
TOTAL - 2004 : 12 Projects		284.8	

Total Private Sector 2003 - 2004 **0.0**

Total Regular Program 2003 - 2004 **488.3**

*** Private Sector Project**



GUATEMALA

STATUS OF LOANS IN EXECUTION

AS OF MAY 31, 2003

(Amount in US\$ thousands)

APPROVAL PERIOD	NUMBER OF PROYECTS	AMOUNT APPROVED*	AMOUNT DISBURSED	% DISBURSED
<u>REGULAR PROGRAM</u>				
Before 1997	3	51,600	37,321	72.33 %
1997 - 1998	8	279,010	201,215	72.12 %
1999 - 2000	4	235,672	74,053	31.42 %
2001 - 2002	10	373,337	120,846	32.37 %
2003	1	25,000	0	0.00 %
<u>PRIVATE SECTOR</u>				
2001 - 2002	1	25,000	0	0.00 %
TOTAL	27	\$989,619	\$433,435	43.80 %

* Net of cancellations. Excludes export financing loans.

RURAL WATER INVESTMENT PROGRAM

(GU-0150)

EXECUTIVE SUMMARY

Borrower:	The Republic of Guatemala	
Executing agency:	<i>Instituto de Fomento Municipal</i> , INFOM	
Amount and source:	IDB: (OC)	US\$50,000,000*
	Local:	<u>US\$ 5,600,000</u>
	Total:	US\$55,600,000
		* Up to US\$15,000,000 will be paid through the Intermediate Financing Facility (IFF)
Financial terms and conditions:	Amortization Period:	25 Years
	Grace Period:	4 Years
	Disbursement Period:	5.5 Years
	Interest Rate:	variable
	Supervision and Inspection:	1.00%
	Credit Fee:	0.75%
	Currency:	US dollars from the Single Currency Facility
Objectives:	<p>The purpose of the Rural Water Investment Program is to increase coverage of potable water and sanitation services in rural areas in a way that ensures sustainability and quality of service. The Program is designed to benefit a minimum of 500,000 new rural consumers located throughout the country. It will support autonomous, legally constituted, community-based associations created to provide water and sanitation services to their communities. (See paragraph 2.1)</p>	
Description:	<p>The Program will comprise three components:</p> <p>Component 1: Construction of potable water and sanitation projects (US\$38.92 million). The Program will fund the construction of water and sanitation systems for single communities or groups of communities with an average population of approximately 900. The projects will be based on normal practice in Guatemala, ranging from simple gravity-flow systems using a protected spring, to pumped supplies from groundwater or surface water sources. All projects will have a sanitation component, usually latrines. (See paragraph 2.4)</p> <p>Component 2: Publicity, promotion, and community support (US\$7.58 million). This component will fund the contracting of a Publicist and eight private companies or NGOs specialized in providing technical assistance to communities (the Promoters). The Publicist will design and implement a publicity campaign to introduce the Program to rural communities throughout Guatemala. The Promoters, one dedicated to each of the eight regions, will complement the activities of the</p>	

Publicist by promoting the Program through local forums and receiving formal requests from communities that wish to participate. The Promoters will then be responsible for providing technical assistance to the eligible communities during the development, implementation and for a year into the operating phase of each project. (See paragraph 2.5 and 3.15)

Component 3: Institutional strengthening (US\$450,000). Institutional support for INFOM. This component will fund the following tasks to help INFOM in its technical support role: (i) the design and putting into operation of an information system for all rural water and sanitation projects, (ii) the review and update of INFOM's technical and construction standards, (iii) the preparation of a procedure for confirming the yield of small raw water sources, and (iv) the implementation of a registry of qualified consultants and constructors. (See paragraph 2.6)

Implementation is designed to put the communities in the center of the Program as owners and decision-makers regarding their own projects. The Program will provide funds for community Associations, created to provide water and sanitation services, to construct their projects. (See paragraph 3.5) The funds will be made available through a trust fund managed by a commercial bank contracted by the Ministry of Finance. Reflows from the communities to the trust fund will be used to fund additional rural water projects. (See paragraph 3.20)

INFOM will contract a private company to act as a Program Manager with responsibility for planning and control. (See paragraph 3.34)

**Bank's country
and sector
strategy:**

The IDB Strategy approved in 2001 remains valid for 2003. Focused on poverty reduction, the strategy includes three lines of action: (i) economic development, economic stability and competitiveness; (ii) equity, social protection and development of human capital; and (iii) modernization of the state and good governance. The Program advances the second line of action providing water and basic sanitation services to rural communities whose family income is below the national average and who currently have no access to an established water and sanitation system.

**Environmental/
social review:**

All projects constructed under the Program will have a component to make sure that any wastewater generated will be disposed of properly. The environmental impact of the projects will probably be small and construction of the works may cause a temporary negative impact. To qualify for funding under the Program, each project must: (i) be shown to be environmentally feasible, and (ii) have an environmental brief, outlining likely impact, mitigation methods and further studies required during implementation. (See paragraph 4.23)

The work of the Promoters during Phase 1, community organization and project development, will include environmental and health education. (See paragraph 4.25)

The Program will have a positive social benefit including health and

quality of life gains such as reduced time carrying water from remote sources. Benefits relating to community participation in the development and ownership of Projects are less tangible, but real, and will lead to increased sustainability. (See paragraph 4.26)

The Program includes specific provisions for including women as active participants in management to ensure better water and sanitation services. (See paragraph 4.27)

Benefits:

The Program will benefit a minimum of 500,000 people living in rural areas. The benefits accrue as the health benefit of having safe drinking water and the time saved in not having to travel long distances to fetch water. (See paragraph 4.28)

Risks:

The main risk to the Program is INFOM's weak administrative capacity. To mitigate this risk INFOM will contract the Program Manager with the executive authority for the planning, control and coordination necessary to complete the Program on time. There remains the risk that Program commencement will be delayed by INFOM's lack of capacity to contract the Program Manager, Promoters and Publicist. To minimize this risk, INFOM will commence the procurement process immediately. The Ministry of Finance will take similar action related to contracting the Fiduciary Bank. (See paragraph 4.32)

The lack of long-term technical support for communities and their Associations may be seen as a risk to the sustainability. The Program mitigates this risk in two ways: (i) the Promoter continues to work with a community for twelve months after the project has been put into operation. The Promoter will give the Association all of the support necessary to make sure that the project is being administered and operated correctly, and (ii) the Associations will charge tariffs that include a sum for creating a maintenance fund, which will be kept in the Association's account at the Fiduciary Bank, and drawn down as needed to cope with large, unscheduled repairs. (See paragraph 4.33)

Special contractual clauses:

As a condition precedent to first disbursement, the Borrower must submit evidence to the IDB that:

1. It has signed a subsidiary agreement for the execution of the Program with INFOM, in accordance with a text previously agreed with the IDB. (See paragraph 3.56)
2. The bank, where the trust fund to manage the Program's resources is to be located, has been contracted by the Ministry of Finance, the trust fund has been established and the Fiduciary Committee of the trust fund has been formed. (See paragraph 3.56)
3. The Operating Regulations have been put into effect (See paragraph 3.56)

The IDB may allow the disbursement of up to US\$500,000 prior to compliance with these conditions, to enable INFOM to contract the Fiduciary Bank, as long as the conditions established in the General Terms of the loan contract have been satisfied. (See paragraph 3.57)

Retroactive Recognition of Expenses	The IDB may recognize as part of the local counterpart expenses up to US\$250,000 incurred by INFOM after 31 st March 2003 for initiating the procurement of the Fiduciary Bank, Program Manager, Publicist, and the Promoters, as long as IDB procurement procedures and policies have been followed.
Poverty-targeting and social sector classification:	The Program qualifies as Poverty Targeted Investment (PTI) under the geographic criteria (document GN-1964-3). The Program will benefit rural households whose average annual income per capita (Q2,070) is well below the national average of Q3,321 a year. (See paragraph 4.30)
Exceptions to IDB policies:	There are no exceptions to IDB policy.
Procurement:	The procurement of goods and services and the contracting of civil works will be subject to the IDB's procedures and policies. (See paragraph 3.55)
Coordination with other official development finance institutions:	The project team consulted with the World Bank during the preparation of the Program. The Social Investment Fund (FIS) has a loan from the World Bank, which is utilized, among other things, for rural water and sanitation projects (see paragraph 1.14). The World Bank is not funding any other water and sanitation projects in Guatemala.
Consultation during preparation:	<p>Prior to the preparation of the Program, INFOM contracted a team of consultants to evaluate projects previously implemented with funds from the IDB. (See paragraph 1.26) The team conducted extensive interviews with focal groups within a sample of communities throughout Guatemala. The findings of the consultants were incorporated in the conceptual design of the Program.</p> <p>As part of the detailed design of the Program, INFOM contracted another team of consultants to study the socio-economic conditions in the communities, levels of income, and the households' capacity to pay tariffs. This team worked in communities, with and without water projects, throughout the country and conducted detailed interviews with the residents.</p> <p>During the early stages of Program preparation, teams from INFOM visited regional centers where they briefed local civic leaders and officials on water sector reform, and the design of the Program.</p> <p>The IDB project team has accompanied INFOM, members of NGOs and other organizations on visits to interview local communities to gauge their attitude towards the Program.</p>

I. BACKGROUND

A. The potable water and sanitation sector in Guatemala

- 1.1 Guatemala is a predominantly rural country: 60% of the population lives in rural areas, a percentage that has remained relatively constant for two decades. Agriculture contributes 26% of GDP and generates 60% of the country's employment.
- 1.2 In common with that of its neighbors in Central America, the potable water and sanitation sector in Guatemala is characterized by low coverage, poor quality services and deteriorating physical assets. Precise figures are not available for water and sanitation service coverage in rural areas. The Pan American Health Organization (PAHO) Assessment of Drinking Water and Sanitation in the Americas conducted in 2000, states that 70% of the rural population had access to a water system, either through a household connection or a standpipe within 200 m of the family dwelling. According to the same assessment, 71% of the rural population has some sort of sanitation system, either a sewerage connection or an individual solution such as a latrine. The PAHO figures are based on secondary information from a number of government sources and are considered to overstate the coverage. A recent report, commissioned by authorities in the sector to propose an investment plan for entire water and sanitation, states that between 58% and 65% of the rural population have access to potable water coverage and between 40% and 45% have latrines. Preliminary data from the 2003 census indicates that 64% of the rural population has some sort of water system, and 74% has some sort of sanitation. The census figures do not distinguish between different types of access, but the PAHO assessment indicates that 69% of the population with a water system benefits from household connections and 79% of the population with sanitation has an individual solution. Applying this information to the census data gives the figures in Table I-1.

Table I-1: Service coverage, rural water and sanitation							
	Potable water service			Sanitation service			
	Household connection	Access within 200m	No service	Connection to sewerage	Individual solution	No service	
Population	3,416,440	1,552,927	2,795,269	1,708,220	4,037,611	2,018,805	7,764,636
	44%	20%	36%	16%	58%	26%	
Figures based on preliminary data from the 2003 census, with the division between the types of access based on PAHO categories.							

- 1.3 The most reliable information on the number of communities without any water system is the *Sistema Nacional de Información de Agua y Saneamiento* (SAS), a database of information collected from the communities. This information is available for only 36% of the nearly 24,000 rural communities in Guatemala, but records 4,000 communities without water systems, of which 2,378 are *caserios* or *aldeas* with more than 20 households. If this proportion is maintained for the communities for which no information is currently available, there will be over 10,000 communities without a water system, approximately 7,000 of which would comprise 20, or more, households.

B. Institutional setting

- 1.4 The institutional framework for the provision of rural water services involves: (i) the *Instituto de Fomento Municipal* (INFOM), charged with the management of sector policy and strategy; (ii) the *Unidad Ejecutora del Programa de Acueductos Rurales* (UNEPAR), a directorate within INFOM; (iii) the municipalities, which have the legal responsibility to provide water and sanitation services; and (iv) the communities themselves, through committees formed with little involvement from the local municipality, to manage the water system.
- 1.5 **INFOM.** INFOM was created by decree in 1957 as a decentralized public institution to support the social and economic development of municipalities through the provision of technical, financial and administrative assistance. INFOM's responsibilities cover a wide range of areas such as training on administration, investment planning, financial and budget management, and urban development and control; providing loans and guarantees for investments; training municipal staff; and providing accounting and treasury services. INFOM has had limited success in strengthening municipalities because of lack of a clear, institutional vision and a set of contradictory mandates and roles. Budget cuts also seem to have contributed to their limited success. INFOM has been particularly weak at project management. The reform of INFOM is being supported by an IDB loan for municipal development (1217/OC-GU), which became eligible for disbursements in August 2002 and includes a component to support basic reforms in INFOM to put its affairs on a more technically sound and sustainable basis. The component will include a basic reorganization of INFOM's functions, increasing management capacity in developing a long-term strategy.
- 1.6 In 1997, Government Decree 376-97, charged INFOM with the responsibility of managing the policy and strategy of the water and sanitation sector. In 1999, INFOM and EMPAGUA, the Municipality of Guatemala's water and sewerage service provider, formed a Coordinating Group, with members nominated by the General Managers of the two organizations, to work on the reform of the sector. At the end of 2001, INFOM gave the initiative new impetus by creating the Directorate for Sector Reform. They have created a small, but dynamic team to man the Directorate. At the request of INFOM, the Government obtained resources from the IDB for a consultancy to prepare a proposal for new policy, planning and regulating institutions. A final report from this consultancy has just been completed and is being evaluated by the Directorate for Sector Reform.
- 1.7 Also in 1997, UNEPAR and *Proyecto de Agua Potable y Saneamiento del Altiplano* (PAYSA), which had been created as dependencies of the Ministry of Health to implement rural water programs, were transferred to INFOM under Government Decree 635-97. PAYSA became a department within UNEPAR, whose main responsibility for implementing rural water projects was maintained intact. The process of integrating UNEPAR with INFOM has been gradual. UNEPAR has kept separate offices, but INFOM has now absorbed UNEPAR's human resources, accounting, and administration personnel. UNEPAR currently operates as a directorate of INFOM, comprising small units to complete the implementation of the PAYSA and programs financed from the national budget and the German development bank (KfW). UNEPAR has also received

the SAS from the Ministry of Health. This national database contains information on the water and sanitation situation in rural communities. The information is updated by surveys whenever a community applies for a water project but still covers less than half of the rural communities.

- 1.8 As it finalizes the projects being implemented, UNEPAR is expected to merge with the Directorate for sector reform where it will play a more strategic role to guide the policy and planning of the rural water sector, set standards and act as a facilitator.
- 1.9 **The Municipalities.** The new Municipal Code published in May 2002 as Government Decree 12-2002, confirms the municipalities' responsibility for providing public services, including water and sanitation, to everyone living within either the urban or rural areas. The provision of water and sanitation as a "public service" can be done by the municipality directly, by a group of municipalities organized as "*mancomunidades*" or by concession contracts which require prior approval of the National Legislature. In all of these cases, tariffs have to be approved by the municipalities. Given their lack of resources and weak institutional capabilities, most municipalities struggle to cover the urban areas, leaving rural populations unserved.
- 1.10 **The Communities.** The void left by municipalities is in practice filled by the communities organized in water committees to provide services in the form of *auto-abastecimiento*, which in Guatemala is considered a "private service" and therefore regulated by the Civil Code. Most water committees operate under an authorization granted by the municipality. As such, they are allowed to collect small contributions from the communities to build and operate a water system. Some committees have become legally incorporated as associations.
- 1.11 The committees are elected by the communities, usually every two years, and comprise a president, vice-president, secretary, treasurer and up to seven committee members. The committee members themselves might be responsible for operation and maintenance, or they may pay someone from the community to operate the system, usually on a part-time basis. The committee is responsible for collecting tariffs from the consumers. Under a government decree, the committee's treasurer may retain up to 10% of the tariff collected to cover the costs of traveling to deposit the amount collected in the committee's bank account.
- 1.12 **Private organizations.** A large number of non-government organizations, both international and local, work with rural communities in the support of water and sanitation projects. These organizations provide technical assistance to the communities, helping them to organize, establish their committees and design their projects. CARE, an international NGO that has extensive experience in rural water in Guatemala, has managed the PAYSA project in conjunction with INFOM. A private foundation called *Génesis Empresarial*, which makes loans to rural communities, provides subsidized technical assistance for community organization and project design.

C. Current sources of funding for the sector

- 1.13 **Projects administered by UNEPAR.** UNEPAR is implementing rural water projects with financing from KfW (US\$10m for a project in Alta Verapaz and US\$10 million for

Petén) and foresees continuing the PAYSA project with the funds that have now been repaid by the communities (See paragraph 1.23). It is also implementing rural water projects, to the value of US\$3 million with finance from the national budget.

- 1.14 **Social Investment Fund (FIS).** The FIS has committed approximately US\$160 million to rural water and sanitation projects since 1994. The IDB has been an important contributor to the FIS and has a current loan of US\$90 million for the east of the country, which was approved in December 1998 and is 70% disbursed (1162/OC-GU). The purpose of the operation is to strengthen the management of local development agencies and to meet pressing socio-economic infrastructure needs in the area. The IDB Country Office estimates that 25% of the loan will be used for water and sanitation projects. So far, US\$16 million has been committed to 176 projects benefiting almost 308,000 people. Of this amount, 68% has been committed to potable water supply projects; the balance has been committed to sanitation and the design of future projects. The FIS has a loan from the World Bank that has committed US\$27 million to 639 water and sanitation projects, benefiting 582,000 people, since 1999.
- 1.15 The World Bank is not funding any other water and sanitation projects in Guatemala.
- 1.16 **The European Union.** The European Union's Program for Rehabilitation of Central America following Hurricane Mitch has a health component for Guatemala that covers Santa Rosa, Izabal and Jutiapa. It is an integrated public health program including training and capacity building for municipalities and local development committees, construction of health centers and, in some communities, water and sanitation facilities. The entire program has a value of Euros 7.5 million and is being implemented directly by the European Union's local office, which contracts all of the necessary goods and services.

D. UNEPAR's traditional approach to rural water and sanitation projects

- 1.17 Each program implemented by UNEPAR has its own features, but they have many factors in common: **Pre-investment Stage.** Projects are initiated by a request from a community, and technicians from UNEPAR visit the community to gather basic legal, socio-economic and technical information to make sure the project is viable. For a project to proceed, the community must be represented by a water committee and have rights to a satisfactory source of water. UNEPAR undertakes a site survey and the engineering design either by contracting a private engineering firm or, more commonly at the moment, doing the work in-house. Occasionally, a community may undertake the necessary studies itself and come to UNEPAR only for funding of construction. **Investment Stage.** The community, and sometimes the municipality within which it falls, provides labor and local materials. UNEPAR purchases materials that cannot be acquired locally, supervises local labor in the construction of the project and contracts private firms for specialist activities such as drilling boreholes or erecting elevated water storage tanks. **Operation and Maintenance.** UNEPAR calculates the tariff to cover the cost of operation, maintenance and, depending on the socio-economic capacity of the community, a fund for replacements and extensions.

- 1.18 UNEPAR takes a long time to implement rural water projects, and often uses different sources of financing for the pre-investment and investment stage of the same projects. Design takes between nine and fourteen months, after which there is often a twelve-month wait to confirm inclusion in one of the programs. UNEPAR has a portfolio of projects with designs, but no funds for their implementation. Once a project is included in a program, procurement of materials and construction takes, on average, an additional seventeen months. Thus, projects may take over three years to implement from the time design commences. This does not take into account the time between the date on which a community first requests a project until design commences and some communities have waited over ten years for their projects to be implemented.
- 1.19 UNEPAR's approach to the communities has been paternalistic. Each program emphasizes the need for community participation but it takes the form of social education rather than active involvement in decision-making. The community often provides local materials and manual labor, but has no active role in the design process. The community is asked to make a decision on tariffs only after the project is complete and is due to be handed over.
- 1.20 Different programs have features that seem to depend on the source of finance. UNEPAR appeared to use the IDB loan (see paragraph 1.25) to finance large individual projects with house connections and sometimes with river intakes and water treatment plants. These projects tend to be over-designed as very conservative design criteria are used, including a design horizon of 20 years and projected daily consumption of 100L/person. The AFP program funded by UNICEF, as well as the national budget, supports very modest projects, avoiding problems of over-design. In the same program, UNICEF, instead of UNEPAR, purchases the materials. Projects funded by KfW are designed under a single contract with a private firm of consulting engineers.
- 1.21 In an effort to make the programs more uniform, UNEPAR has coordinated an effort among the interested parties, mostly the donor and credit organizations, to develop a *Modelo Básico* for the implementation of rural water and sanitation projects. The *Modelo Básico* stresses the following characteristics: promotion of integrated projects covering potable water and sanitation; a tripartite agreement between the community Water Committee, the municipality and UNEPAR; and sustainability ensured by greater community participation. The *Modelo Básico* also calls for tariffs that cover operation and maintenance, as well as a contribution towards a fund for replacements and extension. The *Modelo Básico* covers the project cycle described in paragraph 1.17 but takes the form of a general guide and is not precise enough to be used as an Operating Manual. It does not reflect the institutional changes being made within UNEPAR, nor does it promote community involvement in early decision making. In September 2000, in accordance with a government decree, all social funds, including FIS, were required to adopt the *Modelo Básico*. In practice, FIS projects are still implemented in a way similar to UNEPAR's traditional approach described in paragraphs 1.17 and 1.19.
- 1.22 UNEPAR provides limited support of operation and maintenance once projects have been commissioned. There is no country-wide system for providing technical assistance to communities that already have projects. In practice, the communities usually solve their

own problems, raising money from the householders when it is necessary to replace an expensive piece of equipment or make a repair. In some cases, communities have levied an additional charge on the tariff to build up a maintenance fund in a local bank. Communities also approach the municipalities or the regional offices of INFOM for help.

E. Experience in recovering investment costs

- 1.23 The PAYSA project, which was funded by the USAID, made funds available to rural communities in the highlands for the construction of water and sanitation systems. The communities were required to pay back the sum provided, amounting to approximately Q100 per beneficiary during the first phase of the program from 1990 to 1993 and between Q220 and Q430 per beneficiary for the second phase of the program from 1994 to 1998. In 2003 values, this would be equivalent to US\$30 per beneficiary for the first phase, and between US\$45 and US\$88 for the second phase. When this amount was not sufficient to cover the cost of the system proposed, the program made a grant to cover the difference. During the first phase, the communities paid back the sum provided within five years, during the second phase, within two years. Some communities paid the sum back much sooner than this. The communities' water committees charged a tariff to cover operation, maintenance and an amount to cover the capital cost, which was collected in the normal way. The committees' treasurers were responsible for paying the sum due at UNEPAR's regional office. Despite the fact that the communities are among the poorest in the country, over 80% of the amount has been recovered. UNEPAR reports that this would have been much higher, but for UNEPAR's inefficiency in collecting it. The resulting funds are utilized to pay for the construction of systems in other communities.
- 1.24 Between 1996 and 1998, *Génesis Empresarial*, with financing from BCIE, made loans to rural communities for the introduction of basic services. Most of these loans were for the introduction of electricity, but the foundation also made 21 loans to small rural communities to construct water projects. Interest rates were between 24% and 30% and the loans were amortized between 2 and 4 years. The communities themselves, with technical assistance from the foundation, were involved in all stages of project design and implementation. An independent evaluation of the program noted its success, but considered that the technical assistance must continue to be subsidized to make projects viable. The evaluation reported that in June 1998, arrears of greater than 30 days, based on outstanding principal, were 7.74% of the total portfolio. *Génesis Empresarial* reports that the eventual repayment of the loans was 98%. To obtain credit, the communities either created an association with a legal identity or took on the credit as individuals.

F. The IDB's involvement in rural water projects in Guatemala

- 1.25 The IDB has made five loans for rural water projects. These loans, with a total value of US\$123 million, have benefited 630,000 consumers over a period of more than twenty years. The last operation, financed by a loan of US\$32.8 million (836/SF-GU), was completed in 2002. The loan was approved by the IDB Board in January 1990, and became eligible for disbursements in January 1992. The project met its physical objectives: it has financed the construction, expansion and improvement of 168 water and sanitation systems, benefiting 336,000 people, more than envisaged in the project

proposal. However implementation was very slow and the IDB extended the disbursement period by six and a half years. The IDB Project Completion Report points out that implementation improved after UNEPAR moved from the Ministry of Health to INFOM in 1997, and was granted more administrative, financial and technical independence by INFOM.

- 1.26 There had been a steady improvement in the financial self-sufficiency of projects implemented prior to loan 836/SF-GU, with up to 80% of communities paying tariffs that cover at least operating and maintenance costs. During the implementation of 836/SF-GU, UNEPAR had not followed up to make sure that adequate tariffs were paid. In 2001, the CABILICA fund, administered by the IDB, financed a study to gather this information and investigate the extent of community involvement in, and acceptance of, the projects. The consultants studied a sample of 13 projects in detail and noted that there was a lack of early consultation with the communities. In most of the communities, although the households had the ability to pay, sustainable tariffs were not being collected. They also noted a tendency to overdesign projects. The consultants noted that, when there had been adequate consultation, the communities, despite their limited resources, understood the financial implications, collected the tariffs and managed the funds responsibly.

G. Lessons learned

- 1.27 In addition to the Project Completion Report for the last IDB operation, and the CABILICA study, several lessons have been learned by consulting with UNEPAR project teams, other donors, and the communities themselves. Important lessons learned from projects developed by UNEPAR include: (i) a centralized bureaucracy is not agile enough to implement small projects efficiently; (ii) design in a central office, without consultation, leads to projects that are inappropriate, often over-designed, and not accepted by the community; and (iii) tariffs calculated after construction are less likely to be accepted by the communities.
- 1.28 The most important lesson is from the communities themselves. When the community is involved, and takes real ownership of the project, community solidarity makes sure that it is a success. This means the community should be involved from the beginning, taking informed decisions about project design and cost. With appropriate technical support the communities are more than capable of making these decisions and implementing their own projects. If the communities are accompanied by an organization capable of giving this support all the way through the process until operation is well underway, their project is likely to be successful.
- 1.29 The PAYSA and *Génesis Empresarial* Projects show that even the poorest communities are prepared to pay the capital cost of a project, and to pay a tariff sufficient to cover debt repayment as well as operation.

H. The need for a new approach to rural water and sanitation

- 1.30 The government of Guatemala needs a new approach if it is to make an impact on potable water coverage in rural areas. According to SEGEPLAN, the rural population without water services has grown at a rate of approximately 100,000 a year. To reverse this trend, and meet the Government's target of domestic water connections for 60% of the rural population by 2005, a recent report commissioned by the Directorate of Sector Reform noted that more than US\$220 millions would have to be invested. Taking into account other sources of finance being considered by INFOM¹, including those to be invested in rural water and sanitation by the FIS, a new IDB loan would have to fund projects for approximately half of the proposed expansion, or 100,000 to 125,000 new consumers every year.
- 1.31 There must be a radical change in the way rural water projects are. There are two principle institutional weaknesses in the present system. First: the constraints placed on the process by centralized implementation. Second: lack of community participation in decision-making during the early stages of implementation, which leads to projects that are incompatible with the community's technical and financial capacity.
- 1.32 The management of INFOM recognizes that rural water projects will only be a success if the communities themselves assume responsibility. INFOM would play a role as a strategic planner and source of standards. The communities have demonstrated the capacity to take good collective decisions when they are properly involved, and generally support their water committees by paying sustainable tariffs so that the systems are administered responsibly. INFOM can build on these strengths by: (i) making the communities, through associations with a legal identity, responsible for all stages of project implementation; (ii) using suitable organizations with the necessary capacity to provide the technical assistance needed to support the communities in the design and implementation of their projects; and (iii) contracting out overall planning and control, and the management of the Program's financial resources. The central office of INFOM would generate and update a database of information as well as maintain design and construction standards for rural water and sanitation projects. This is the basis of the Program proposed in this report and for which the Government of Guatemala has requested a loan of US\$50 million.
- 1.33 The Government of Guatemala also wishes to reduce the net fiscal burden of water projects, so they must be self-funding as much as possible. As rural communities have demonstrated both the willingness and capacity to pay for water projects, INFOM wishes to build on the experience gained from the PAYSA and incorporate a mechanism to recover the investment costs from the communities, using the resulting payments to fund additional projects. INFOM will continue to support communities that, due to their dispersion, isolation or financial situation, need very simple projects such as a protected, hand-dug well, manual extraction pump and a public standpipe. The Government of Guatemala is obtaining a loan with a bilateral donor that could use the same mechanism

¹ From this part of the report, as UNEPAR is no longer legally distinguishable from INFOM, and as the report deals with future activities, the term INFOM only will be used.

as the IDB loan, part of which could be reserved to make grants to communities for these projects.

I. IDB Country and Sector Strategy

- 1.34 The IDB Strategy approved in 2001 remains valid for 2003. Focused on poverty reduction, the strategy includes three lines of action: (i) economic development, economic stability and competitiveness; (ii) equity, social protection and development of human capital; and (iii) modernization of the state and good governance. The Program advances the second line of action providing water and basic sanitation services to rural communities whose family income is below the national average and who currently have no access to an established water and sanitation system.

II. THE RURAL WATER INVESTMENT PROGRAM

A. Objectives and description

- 2.1 The purpose of the Rural Water Investment Program is to increase coverage of potable water and sanitation services in rural areas in a way that ensures sustainability and quality of service. The Program is designed to benefit a minimum of 500,000 new rural consumers located throughout the country. It will support autonomous, legally constituted, community-based Associations created to provide water and sanitation services to their communities in the form of *auto-abastecimiento*. As a first priority, any rural community that does not have a potable water facility that was constructed, enlarged, or improved during the last five years will be eligible to participate in the Program. Rural communities range from *caserios*, with a minimum of 20 dwellings, to *aldeas*, with no official upper population limit. Most of the larger *aldeas* already have potable water facilities, so the Program will focus on the smaller communities. If the demand from these communities is satisfied, then communities that are seeking extensions or the rehabilitation of existing facilities may be eligible for the Program, as will communities with water facilities that are seeking sanitation-only projects.
- 2.2 The Program will differ fundamentally from the approach used for past IDB-funded rural water programs in Guatemala. It will fund technical assistance for the communities, enabling them to make all of the important decisions related to their own projects: from deciding to participate in the Program, to choosing among alternative systems with different costs and contracting the works and services needed. Based on its new strategic approach to the sector, INFOM will be responsible for the policy and planning of the rural water sector, and for setting standards and facilitating the work of the communities. The Program will fund the capital costs of water and sanitation projects with a combination of reimbursable and non-reimbursable funds, depending on the financial capacity of each community. The communities will repay the reimbursable funds and meet the operation and maintenance costs of the systems by levying tariffs on the users. The Program will generate information so that communities can make meaningful financial decisions early in implementation. Reimbursement of the funds by the communities will enable INFOM to make commitments to fund additional rural water and sanitation projects. The Program is designed so that it specifically benefits poor communities and the technical assistance provided to all communities will be free. When a community does not have the financial capacity to reimburse the full capital costs, the Program may subsidize a portion of the construction costs.
- 2.3 The Program will comprise three components: (i) the construction of potable water and sanitation projects, (ii) publicity, promotion, and technical support for each community, and (iii) the institutional support for INFOM so that it can play its role in managing the water and sanitation sector. Because INFOM's new role is normative rather than operational, it will contract a private firm that will act as a Program Manager to plan and control Program implementation. Funds will flow through a fiduciary fund managed by a commercial bank.

- 2.4 **Component 1: Construction of Potable Water and Sanitation Projects.** (US\$38.92 million) The largest component, which accounts for 70% of the value of the Program, will provide funds for rural communities to contract the construction of potable water and sanitation facilities. The design of the facilities will be commensurate with the financial capacity of the communities and with the levels of operation and maintenance that they can manage. The component will fund materials, construction, installation and putting the project into operation. It is estimated that the Program will fund the construction of water and sanitation systems for single communities or groups of communities with an average population of approximately 900. The projects will range from gravity-fed, protected springs to deep boreholes with electrical pumps or river intakes. Where a project includes electrical pumping and household connections, household meters will be installed. All projects will have a sanitation component, usually latrines.
- 2.5 **Component 2: Publicity, Promotion and Community Support.** (US\$7.58 million) This component will fund the contracting of a Publicist and eight private companies or NGOs specialized in providing technical assistance to communities (the Promoters). The Publicist will design and implement a publicity campaign to introduce the Program to rural communities throughout Guatemala and invite them to participate. The campaign, which will be specifically designed to ensure that no population group is excluded, will be based heavily on the radio stations, which broadcast in the different regional languages. The Promoters will complement the activities of the Publicist by promoting the Program through local forums and receiving formal requests from communities that wish to participate. The Promoters will then be responsible for accompanying the eligible communities in the development of their projects, providing sanitation and environmental education, explaining the benefits as well as the costs of the various options and helping the communities to choose projects compatible with their financial and technical capacity. The Promoters will assist the community organization and the creation of an Association when one does not exist. The Promoters will undertake the technical, environmental, financial and socio-economic analysis necessary to show the project's viability and certify applications for funding under the Program. The Promoters will also accompany the communities providing technical assistance during the construction phase and during the first twelve months of the operating and maintenance phase.
- 2.6 **Component 3: Institutional Strengthening.** (US\$450,000) This component will fund the contracting of consultants to perform specific activities to help INFOM in its technical support role. These activities include: (i) the redesign and implementation of the SAS database transferred to INFOM from the Ministry of Health; (ii) the review and update of INFOM's technical and construction standards to make sure they adequately cover the projects envisaged for the Program; (iii) the preparation of a procedure for confirming the yield of small raw water sources in Guatemala; and (iv) the design and implementation of a registry of qualified consultants, constructors and other suppliers of goods and services for the communities to use when contracting the construction of projects.
- 2.7 **Administration Costs.** (US\$2.78 million) This category covers the costs of administering the Program, including: (i) contracting the firm to act as Program Manager; (ii) contracting a private bank to manage the financial transactions; and (iii) covering the

costs of two employees who will constitute the coordinating unit within INFOM, on a decreasing basis. Resources from the loan may be used to cover 100% of the costs of the two INFOM employees for the first 12 months, 75% for the second year, 50% for the third and 25% for the fourth. Also included in the component is a fee for auditing and the technical evaluations of the Program.

B. Cost and financing

2.8 The size of the Program was set at US\$55.6 million, US\$50 million of which correspond to an IDB loan. The Program qualifies as a Poverty Targeted Investment and the Government of Guatemala has opted to take advantage of the possibility of reducing counterpart to 10% of the Program cost. The Government will accordingly contribute US\$5.6 million as counterpart funds. The breakdown of Program costs is given in Table-II-1.

Table II-1: Estimated Program Costs by Category (US\$ millions)				
Category	IDB	Local	Total	%
Component 1: Construction of Projects	38.55	0.37	38.92	70
Construction contracts	38.55	0.37	38.92	
Component 2: Publicity, Promotion and Community Support	7.58	0	7.58	13.6
Publicist's contract	0.40	0	0.40	
Promoters' contracts	7.18	0	7.18	
Component 3: Institutional development	0.41	0.04	0.45	0.8
Installation of information system	0.15	0	0.15	
Update of technical standards	0.15	0	0.15	
Preparation of hydrological procedure	0.11	0	0.11	
Management of tender and selection process	0	0.02	0.02	
Registry of contractors and consultants	0.00	0.02	0.02	
Program Administration	2.73	0.05	2.78	5.0
Administration of trust fund	0.42	0	0.42	
Program Manager's contract	2.05	0	2.05	
INFOM supervising unit	0.04	0.05	0.09	
Auditing	0.06	0.00	0.06	
Technical evaluation	0.16	0.00	0.16	
SUB-TOTAL	49.27	0.46	49.73	89.4
Financial Costs				
Interest	0	4.12	4.12	7.2
Commitment fees	0	1.02	1.02	2.0
Inspection and supervision fee	0.50	0	0.50	0.9
Contingencies	0.23	0	0.23	0.4
TOTAL	50.00	5.60	55.60	100.0

- 2.9 The IDB loan of US\$50 million will be made available from Ordinary Capital resources. The interest rate for US\$15 million of the loan will be subsidized from the Intermediate Financing Facility (IFF).

Table II-2: Loan Conditions	
Amortization period:	25 years
Disbursement period:	5.5 years
Grace period:	4 years on capital repayments
Normal interest rate for OC resources:	Variable
Inspection and supervision fee:	1%
Commitment fee:	0.75% of commitment not disbursed

- 2.10 All of the construction of water and sanitation projects will be completed within 4 years. The Program will last five years as the Promoters have responsibilities under the Program for twelve months after the last project is constructed. Disbursement will be over an additional six months to cover retention payments to the Promoters and Program Manager. An estimated schedule of disbursements is given in Table-II-3.

Table II-3: Estimated schedule of disbursements (US\$)						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
6,319,500	16,127,500	16,683,500	14,459,500	1,810,000	200,000	55,600,000

C. Retroactive recognition of expenses

- 2.11 As part of the local counterpart the IDB may recognize expenses of up to US\$250,000 incurred by INFOM after 31st March 2003 for initiating the procurement of the Trustee Bank, Program Manager, Publicist, and the Promoters, as long as IDB procurement procedures and policies have been followed.

III. PROGRAM IMPLEMENTATION

A. Principles of implementation

- 3.1 Implementation is designed to put the communities in the center of the Program as owners and decision makers regarding their own projects. A publicity campaign will ensure that all communities have a fair chance of participating. Communities that commit to participation will be supported by technical assistance to enable them to make appropriate decisions and submit viable projects for funding. The technical assistance will continue during the implementation phase and for a year into the operating phase of each project. Implementation will be facilitated by a private firm that will assume responsibility for the Program management and a commercial bank that will manage the Programs resources in a trust fund.

B. The Borrower and Executing Agency

- 3.2 The Republic of Guatemala will be the Borrower. The *Instituto de Fomento Municipal* (INFOM) will be the executing agency, although individual community associations will be responsible for implementing their own projects funded by the Program. An agreement (*convenio subsidiario*) will be signed between the Ministry of Finance and INFOM, which will indicate the responsibilities and obligations of each party. Evidence that this agreement has been signed will be a condition of first disbursement under the Program.
- 3.3 INFOM will supervise overall execution of the Program through a small coordinating unit with two technical staff located in the Directorate for the Reform of the Sector. The coordinating unit will work closely with other units in INFOM to ensure harmonization of rules and procedures among water and sanitation programs funded by other donors. The coordinating unit will be responsible for submitting disbursement requests and presenting all reports required by the IDB. INFOM will contract a firm that specializes in project management to be the Program Manager (see paragraph 3.34), the Publicist (see paragraph 3.13), and the Promoters (see paragraph 3.14).

C. The Project Cycle and the Role of the Communities

- 3.4 **Phase I: Community Organization and Project Development.** A campaign on the most popular radio stations will publicize the Program and invite representatives of rural communities to attend meetings, run by regional Promoters, where the Program is explained in detail. Communities will be invited to participate in the Program. Interested communities will be visited by the Promoter who will provide technical assistance throughout all phases of the project to any eligible community that formally applies to participate in the Program. To participate in the Program a community must demonstrate that it: (i) comprises at least 20 dwellings, (ii) does not have a water system that has been constructed, enlarged or improved within the last five years, and (iii) is willing to comply with the rules of the Program.

- 3.5 Each community will create a non-profit Association, the members of which must include at least 85% of the families of the community. The Association will be legally constituted once its by-laws are registered at the local municipality, a process that takes an average of 20-25 days. The legal fees associated with the incorporation will be paid by the community. The Association will have as its main purpose the construction, operation and maintenance of a potable supply and sanitation project and will have the legal capacity to enter into the contracts necessary to achieve this purpose.
- 3.6 The by-laws of the Associations will include: (i) each member's commitment to pay tariffs for services received; (ii) the methodology for calculating and updating the tariffs; (iii) the ability of the Association to exclude consumers from the services for non-payment; (iv) the joint and several liability of each member of the Association to repay the reimbursable part of the funding received from the Program; and (v) the obligation to provide services to all families in the community who agree to pay the tariff, even if they are not members of the Association. A model form of an Association's by-laws is part of the Operating Regulations.
- 3.7 Each Association will have a General Assembly composed of all members of the Association responsible for major decisions. There will be a Board of Directors composed of at least a president, a vice-president, and a treasurer. At least two members of the Board of Directors will be women. Unless the Association decides otherwise, members of the Board of Directors will be expected to work on a part-time basis, for which the Association may pay them a stipend (not covered by the Program).
- 3.8 Each Association will define its water project to match its needs in consultation with the community, the final decision being made by a qualified majority of 75% of the General Assembly. Project design will be sufficiently accurate to determine the construction and operating costs and, therefore, the resulting tariffs. The Association will ensure that the project is compatible with the financial and technical capacity of the community and will be responsible for explaining the implications of the project, especially those relating to tariffs.
- 3.9 An Association will present an application, which will be eligible for funding by the Program when: (i) the Association is properly constituted and registered; (ii) the Promoter certifies that the project is viable in economic, financial, environmental and technical terms; (iii) a brief on environmental and social impact has been prepared; (iv) the General Assembly of the Association agrees to tariffs that meet sustainability criteria; (v) the General Assembly issues a communal, fiduciary guarantee for the funds to be reimbursed; (vi) the Association has the necessary access and exploitation rights of the land and water source to be used for the project; and (vii) the Program Manager has reviewed the application, confirmed that the documentation is in order and is properly certified.
- 3.10 **Phase 2: Construction.** When funding is approved, an Association will let a contract for the construction of their project. It will invite tenders for the work from the register of contractors provided by INFOM and select the winner on a competitive basis. The Association may contract a consultant for detailed design; otherwise it will be carried out

by the constructor keeping responsibility for design, construction supply and installation of equipment with a single entity. The design and construction contracts (whether separate or single contracts) will include the obligation to comply with Guatemala's environmental law and regulations, prepare any environmental studies, as well as prepare and implement mitigation measures. A model form of construction contract appears in the Operating Regulations.

- 3.11 The Association will take over the project during commissioning trials at the end of construction.
- 3.12 **Phase 3: Operation and Maintenance.** Each Association will be responsible for the administration, operation and maintenance of the project after construction. The treasurer of each Association will be responsible for collecting tariffs and making payments to the trust fund. For this service, the treasurer will retain a percentage of the amount reimbursed, which will be stipulated in the funding agreement. Each Association will be responsible for keeping financial records in accordance with a simple bookkeeping method (see paragraph 3.25).

D. Publicity and technical support

- 3.13 **Publicist.** INFOM will contract a firm specializing in the design and implementation of publicity campaigns as the Publicist, which will be responsible for making sure that rural communities in Guatemala know about the Program. The Publicist will prepare its materials in Spanish and in the predominant language in the rural areas of each region. INFOM will contract the Publicist for a period of 30 months, but the effort required will be greatest during the first 18 months. The number of communities that attend the regional and local forums (see paragraph 3.14) will be used to measure the effectiveness of the Publicist's work.
- 3.14 **Promoters.** INFOM will contract eight Promoters, one for each region, which may be private companies or Non-Government Organizations (NGOs) with the necessary multi-disciplinary expertise. The Promoters will have specific responsibility for: (i) providing the communities and their associations with technical assistance during all of the phases of the project cycle; (ii) certifying that Associations have complied with the conditions for funding under the Program; (iii) supervising construction of the projects; and (iv) measuring construction for the purpose of certifying payment to the constructors. The Promoters will start their work in parallel with, and complementary to, that of the Publicist by running regional and local forums to make sure that the Program is adequately disseminated. A Promoter will visit all interested communities and will work with eligible communities that formally express their interest in joining the Program. They will be responsible for providing technical assistance to these Communities through each phase of the project cycle.
- 3.15 During Phase 1, community organization and project development, the Promoters will support the community with public health education and the benefits of a formal potable water and sanitation system. The Promoter will assist with the creation and registration of the Association. The Promoters will provide the communities with the technical

assistance necessary for them to make informed decisions about the design of their projects, both from a financial and technical point of view. This will be an iterative process of considering various options with different financial and technical implications. The Promoters will prepare the studies necessary to determine the technical, financial, and socioeconomic feasibility of the project. The Promoters will help the Associations to produce a brief describing the environmental and social impact of the Project and the requirements for studying and mitigating the problems during Phase 2. The Promoters will assist the Association in completing its application for funding under the Program. The Promoter will have on their staff professional engineers, economists and lawyers and will have a specific responsibility for certifying that each of the eligibility criteria for funding has been fulfilled.

- 3.16 The Promoters will continue to work with the communities to which they are assigned once a project is approved and enters Phase 2, construction. The Promoters will assist the Associations in establishing a simple accounting and budgeting system following a format provided by the Fiduciary Bank (see paragraph 3.25). They will also support the Associations in calling for tenders and entering into contracts for the construction of the projects. The Promoter will be present to advise the Association during the completion tests after construction and the handover of the project. The Promoters will have a specific responsibility for supervising the construction, making sure that it is in accordance with the standards, measuring the work and certifying that contractors are due for payment.
- 3.17 The relevant Promoter will work with an Association during the first 12 months of Phase 3, operation and maintenance to ensure that the project is correctly operated and maintained. The Promoter will assist the Association with its financial management including collecting tariffs, keeping adequate records and reimbursing the trust fund.
- 3.18 Each Promoter will be contracted for a period of 54 months to implement projects within the region for which that Promoter is responsible. The Promoters remuneration is designed to act as an incentive to complete the preparation and implementation of projects on time. In addition to certain fixed costs, and costs not directly associated with projects, the Promoter will be paid a fixed amount per person that benefits from a project funded by the Program, 50% of the amount being released when a project is approved for funding under the Program, 20% when the project is put into operation, and 30% after the first 12 months of satisfactory operation.
- 3.19 INFOM intend to make the role of the Promoter permanent and will start the process of rehiring or contracting new Promoters during the fourth year of the Program. These Promoters will carry out the same tasks as the first ones, but they will also be charged with making two visits a year to any community that has had a project funded by the Program. The Promoters will perform an annual audit by checking the financial records of the Associations. The costs of the Promoters that are involved in developing new projects after the fourth year of the Program will be met from the trust fund. (See paragraph 3.27).

E. The financial mechanism

- 3.20 All Program funds will be made available through a revolving fund established as a trust fund in a commercial bank (the Fiduciary Bank), which will be contracted by the Ministry of Finance. The Fiduciary Bank will hold resources from both the IDB loan and counterpart contribution from the government in separate accounts, and will be overseen by a Fiduciary Committee comprising functionaries of INFOM and the Fiduciary Bank. The Operating Regulations governing the responsibilities of the Fiduciary Bank will include: (i) the Program's funding policies and the rules of eligibility for funding, (ii) the conditions for funding projects, (iii) the regulations for the functioning of the Fiduciary Committee, (iv) rules for the payment of goods and services contracted by INFOM, and (v) the rules for establishing tariffs and non-reimbursable funding for communities.
- 3.21 Each Association that applies, and shows that its project is eligible (see paragraph 3.9), will be approved by the Fiduciary Committee on a first-come, first-served basis. It will then sign a funding agreement with the Fiduciary Bank for the direct costs of construction, less the cost of materials or unskilled labor provided by the community itself. The maximum amount made available to an Association will be the cost of the project. Under the terms of the agreement, an Association will open an account in the Fiduciary Bank in which to deposit the payments towards a maintenance fund for unscheduled repairs to the project and reimbursements to replenish the trust fund. The agreement will stipulate the rules for calculating sustainable tariffs to cover the cost of routine administration and operation, deposits to the maintenance fund and the reimbursements to replenish the trust fund. An Association's Treasurer will make monthly deposits into the account and the amount for the replenishment will be automatically transferred to the trust fund. A copy of a model form of funding agreement between the Fiduciary Bank and the Associations is part of the Operating Regulations.
- 3.22 The reimbursable part of the funding will be made available at an interest rate that shadows market rates based on the average of two indices published by the Central Bank of Guatemala: the average lending rate for mortgages (*tasa hipotecaria*) and the lending rate charged by cooperatives plus 0.5% reserve for non-payment. This rate is 15.5% at the moment, has shown little volatility over the long run and reflects the risk of lending to rural communities. The Associations will make reimbursements over 10 years, which reflects the useful life of rural water projects, and the Associations will be granted a grace period for capital payments equivalent to the period of construction plus two months to initiate operations, or twelve months, whichever is shorter. The Associations will make interest payments, on a monthly basis, starting a month after the first disbursement. The trust fund will charge a penalty on late payments equivalent to the penalty charged for late mortgage payments. This is 3.2% per month at the moment. In addition, the trust fund will not allow an Association access to its maintenance fund if it is late with reimbursements. An Association in arrears will also be denied funding for future projects for rehabilitation or expansion of coverage.
- 3.23 Under certain circumstances the trust fund may provide a portion of the funding to an Association on a non-reimbursable basis. If the Promoters demonstrate that more than 50% of the families in a community, based on observable household characteristics, such

as construction materials that are established in the Operating Regulations, belong to the lowest income quintile, then 30% of the funds required will be provided to the relevant Association on a non-reimbursable basis.

- 3.24 The Associations may reduce funding requests by providing cash down payments or making in-kind contributions in the form of local labor and local materials. There will be no minimum contribution from the community as it is expected that all Associations will try to reduce funding requirements by making a local contribution. In line with the Program's principles, the communities themselves should decide what is in their best interests. The sense of ownership by the communities will be permanently supported by the work of the Promoters through the interaction with the communities during the different phases of the projects.
- 3.25 The Fiduciary Bank will also develop a simple method of bookkeeping to enable the Associations to keep records in a way that is appropriate to the size of the operations and permits a simple annual audit.
- 3.26 The trust fund will disburse funds to pay for the construction of a project, against an invoice from the constructor, endorsed by an Association and certified by the relevant Promoter. Eligible costs will include labor costs of the constructor, materials used in the construction, electro-mechanical and other equipment installed as part of the project, and, if necessary, consultancy services. The funds will be disbursed directly to the constructor.
- 3.27 The trust fund will disburse funds to cover the costs of the Program Manager, the administration of the trust fund, the Publicist, the Promoters and the procurement of consulting services for institutional strengthening against the authorization of INFOM. None of these costs will be charged to the communities, but they are genuine costs attributable to the Program. The Fiduciary Bank will account for all these costs, as well as the direct costs of construction, to make sure that they are properly allocated and that the true total cost of the rural water and sanitation projects covered by the Program is reflected in the financial accounts of the Program.
- 3.28 The Fiduciary Bank will provide all of the information necessary for INFOM to comply with its financial reporting obligations to the IDB (see paragraphs 3.44 and 3.45). The Fiduciary Bank will maintain separate ledgers that distinguish between IDB loan and counterpart resources. It will keep complete financial records for the Program, with detailed information on the reception and use of resources. It will submit to INFOM monthly financial reports which will include details of all operations performed during the month, and in particular: (i) new funding approvals; (ii) disbursement on previous approvals; (iii) reimbursements; (iv) payments of goods and services for INFOM; and (v) Associations that are late with the reimbursement of Program funds. As set out in the Operating Regulations, the Fiduciary Bank will keep separate files for original documentation submitted by the Associations and INFOM to support the justification of expenses. In addition, the Fiduciary Bank will maintain reconciliation statements for each funding agreement.

- 3.29 The trust fund will be established for a duration of at least twenty-five years and is designed to provide funds for additional water and sanitation projects, with resources recovered from the Associations that have benefited from the first approvals. To maintain the implementation mechanism, the trust fund will cover the cost of Promoters and a Program Manager while it is funding additional projects. The trust fund will be able to fund additional projects starting from the second year of the Program, as the Associations will begin to reimburse the trust fund.
- 3.30 The Fiduciary Bank will be selected by competitive public bidding. INFOM and the Ministry of Finance will ensure that the process of selecting the Fiduciary Bank is genuinely competitive. The terms of reference setting out the selection process are given in the Operating Regulations. The criteria that will be used to select the bank include: (i) financial stability; (ii) geographical representation; (iii) experience with handling small transactions with, and collecting loans from, rural customers; and (iv) adequate financial and accounting systems to track all transactions. Banks will be able to bid either as individual banks or as members of consortia, to manage the trust fund for part or all of the country. Payment will be based on a fixed fee for administration of the trust fund, plus a variable component related to the level of reimbursement from the Associations.

F. Operating regulations

- 3.31 INFOM has produced the Operating Regulations, a document to serve as a compendium of standards, rules and procedures applicable to the Program. It contains four basic parts: (i) a detailed description of the Program and the project cycle giving all of the procedures; (ii) a description of the purpose and responsibilities of each actor in the Program; (iii) the Operating Regulations for the Fiduciary Bank (see paragraph 3.20); and (iv) model forms for all of the constitutions, agreements and contracts needed for the Program. An advanced draft of the Operating Regulations is available in the Program files
- 3.32 The Operating Regulations will serve as an instruction manual for all of the actors and will be supplemented by detailed terms of reference for the communities and Associations, INFOM, the Publicist, the Promoters and construction contractors. Each will be cross-referenced to the Operating Regulations.
- 3.33 The Operating Regulations plus the terms of reference for each actor will serve as a basic document for the planning and control of the Program. The Program Manager will use the document as the definition of how the Program is to be developed. INFOM will also use it as one of the base documents against which performance of the Program Manager will be measured. INFOM must put the Operating Regulations into effect as a condition precedent to first disbursement of funds from the IDB loan.

G. Program management

- 3.34 INFOM will contract a company that specializes in project management as the Program Manager, for the planning, monitoring and control of all of the Program's activities. The

Program Manager will be responsible to INFOM for the implementation of the Program on schedule, in accordance with the Operating Regulations and within the Budget.

- 3.35 The Program Manager has four basic responsibilities: (i) during the planning period, the Program Manager will draw up a detailed Work Plan giving all Program activities and clearly defining completion dates. The Work Plan will be agreed with INFOM and will become, along with the Operating Regulations and the Budget, the base documents for the control of the Program against which progress will be measured. The planning period terminates once the Work Plan has been agreed and the Publicist, Promoters and Fiduciary Bank have been contracted; (ii) During the implementing period the Program Manager will be responsible for monitoring the day-to-day activities of the Program against the Work Plan, maintaining an up-to-date Work Plan to compare performance against the original, directing the various actors to correct implementation that is contrary to the Work Plan and reporting serious deviations from the original Work Plan to INFOM; (iii) The Program Manager will review each funding application from the Associations and, if the documentation is in order and certified by the relevant Promoter, present it to the Fiduciary Committee on behalf of the Association. The Program Manager will attend meetings of the Fiduciary Committee to answer questions, but will have no vote; and (iv) The Program Manager will be responsible for producing all of the information required by INFOM for their routine reports to the IDB. The Program Manager will review all financial information maintained by the Fiduciary Bank and submitted to INFOM for reports to the IDB. The Program Manager will support INFOM in the preparation of: requests for, and justification of, requests for disbursements; six-months reports on the revolving fund, within sixty days of dosing the relevant accounting period, and audited financial statements. The Program Manager will design the method of reporting in accordance with the rules and procedures of the IDB, and in consultation with INFOM, the Ministry of Finance and the Fiduciary Bank.
- 3.36 The contract with INFOM will provide the Program Manager with the executive authority to coordinate all of the actors involved in the Program. INFOM will ensure that the contracts with all other actors complement the contract of the Program Manager, and give the Program Manager the normal rights of the contracting party to supervise and instruct.
- 3.37 The company to act as the Program Manager will be selected by competitive tender and will have a contract for 57 months: up to the end of the 12 month period during which the Promoters assist the Associations with the last projects to be put into operation. The Program Manager will receive a mobilization fee and a further lump sum payment for producing the Work Plan once it has been negotiated and agreed with INFOM. The Program Manager will also receive routine payments to cover the costs of routine planning, attending meetings of the Fiduciary Committee and preparing routine reports. Finally, as an incentive similar to that paid to the Promoters, the Program Manager will also be paid a fixed amount per person that benefits from a project financed by the Program. 30% of the amount will be released when a project is approved under the Program, a further 55% when the project is put into operation, and 15%, after the first 12 months of satisfactory operation.

H. The role of INFOM

- 3.38 As the executing agency for the Program, INFOM will be responsible for contracting the Program Manager, the Publicist and the Promoters. INFOM will have overall responsibility for the supervision of the Program, will specifically monitor the performance of the Program Manager in planning and controlling the Program, and will sit on the Fiduciary Committee of the trust fund to review and approve all applications for funding made by the Associations. INFOM will also collect the information generated by the Program and all other rural water programs being implemented in the country in order to develop lessons learned and a set of best practices that can be widely disseminated to rural communities.
- 3.39 INFOM will be responsible for contracting consultants for the specific activities, detailed in paragraph 2.6, designed to help INFOM in its technical support role.

I. Program duration and timetable

- 3.40 The Program Manager will be contracted within 3 months of the Program becoming eligible for disbursements. The Publicist and the Promoter will be contracted within 6 months of the Program becoming eligible and will commence their work with the communities. The first projects will be prepared and approved for funding within a further 6 months, that is, by month 12 of implementation, when construction of projects will commence. Construction of projects will be completed by month 48. The Program Manager and the Promoters will have responsibilities during the 12-month period following putting the final projects constructed into operation. Disbursements will be allowed up to an additional 6 months following month 60. The dates estimated for milestone events in Program implementation are given in Table III-1.

Table III-1: Milestone dates		
Activity	Completion date	Prime responsibility
Pre-qualification call for Trustee Bank, Program Manager, Publicist and Promoters.	Prior to effectiveness	INFOM
Short-list created for Trustee Bank, Program Manager, Publicist and Promoters.	Prior to effectiveness	INFOM
Offers received and evaluated for Trustee Bank, Program Manager, Publicist and Promoters.	Prior to effectiveness	INFOM
PROGRAM EFFECTIVE	Month 0	
Trustee Bank contracted	Month 1	Ministry of Finance
PROGRAM ELIGIBLE FOR DISBURSEMENTS	Month 1	
Program Manager contracted	Month 3	INFOM
Publicist and Promoters contracted	Month 6	INFOM
Work Plan agreed	Month 6	Program Manager and INFOM
First communities eligible for Program	Month 9	Program Manager
First Funding Agreements for Projects signed. Construction commences	Month 12	Program Manager
Final Project commissioned. Construction completed	Month 48	Program Manager
Final operating period completed	Month 60	Program Manager
Final disbursement	Month 66	INFOM

- 3.41 The duration of intermediate activities and secondary milestones will be defined in the detailed Work Plan.

J. Performance indicators

- 3.42 There are two important aspects of the Program's purpose that require performance indicators: increase in coverage and sustainability. INFOM and the IDB will measure the increase in coverage as the number of new consumers served by projects constructed under the Program. The performance indicator related to the Program's purpose is 500,000 new beneficiaries. They will measure sustainability as the percentage of communities where the tariffs originally agreed are being paid after twelve months of operation and where reimbursements are being made to the trust fund as scheduled. The target in both cases is 95%. Performance indicators used for the routine monitoring and evaluation of the Program are given in Table III-2.

Table III-2: Indicators for routine monitoring and evaluation		
Indicator	Criteria	Benchmark
Global indicators		
Number of beneficiaries served.	New beneficiaries.	500,000
	Beneficiaries per US\$10,000 of loan disbursed.	100
Efficiency of publicity.	Number of communities with knowledge of Program. (% of total)	90
Indicators for individual projects		
Institutional	General Assembly of Association. (% of households represented)	>85
	Association Board of Directors. (monthly meetings)	1
Service levels.	Coverage (% of community with water services)	95
	Potable water consumption. (L/person/day)	>40
	Sanitation. (latrines/family)	1
Financial sustainability.	Ratio of tariff income to costs (reimbursement to trust fund, operation and maintenance fund).	1
	Deposits in maintenance funds (% of amounts calculated)	>95
	Late payment of tariffs (%)	<5
	Reimbursement to trust fund. (% of amount due)	>95

K. Revolving fund

- 3.43 A revolving fund of 5% will be established for IDB disbursements.

L. Disbursements

- 3.44 The Ministry of Finance will deposit resources from the IDB loan and counterpart funds in two special accounts managed by the Fiduciary Bank. INFOM will present requests for advances and disbursements and will maintain all supporting information and document for ex-post review by the IDB. As part of the ex-post reviews, the IDB will also make visits to verify that the projects have been constructed as certified.

M. Records, inspections and reports

- 3.45 INFOM will be responsible to the IDB for maintaining an adequate administrative, financial, accounting and internal control system that operates in the Executing Agency

and, in collaboration with the Ministry of Finance, in the Fiduciary Bank. These systems will: (i) maintain separate bank accounts for IDB and counterpart funds; (ii) maintain separate accounting records and internal control for the use of the project funds as indicated in Article 7.01 of the General Contractual Conditions of the IDB loan contract; (iii) maintain detailed information for the preparation of a consolidated financial report in accordance with the procedures of the IDB; (iv) maintain original and appropriate support documentation of Program expenses in an accessible filing system; and (v) keep appropriate records of disbursement requests.

N. Auditing

- 3.46 Auditing will be carried out at various levels to ensure adequate control of the financial management system. To ensure compliance with procedures, the external audit will cover the Program, the Executing Agency, the Fiduciary Bank and a sample of Associations.
- 3.47 In accordance with Article 7.03 of the General Contractual Conditions of the IDB loan contract, the external financial audit of the Program will be carried out by an independent audit firm acceptable to the IDB, in accordance with terms of reference previously approved by the IDB. The external audit will present an annual consolidated audit report 120 days after the end of the fiscal year, during the execution of the Program. The cost of the audit will be included and covered with the Bank loan.

O. Monitoring and evaluation

- 3.48 In addition to the routine financial audits required for all IDB loans, the monitoring will comprise independent technical evaluations and meetings at specific milestones.
- 3.49 INFOM will contract an independent firm to do technical evaluations of progress against the Work Plan when 10%, 30% and 90% of the funds from the IDB loan have been disbursed. The firm will evaluate randomly chosen projects prior to presentation to the Fiduciary Committee, during construction and after they have been put into operation. The evaluations will be tailored to the design of the Program and will be based on five specific questions: (i) Are all communities without water and sanitation projects in the rural areas aware of the Program? At the regional level, the evaluation will compare the number of new projects with the number of communities without water services. At the community level, the evaluation will determine whether the projects are satisfying the specific demands of the community (i.e., whether the community is using the project and whether it is delivering a worthwhile improvement in service); (ii) Is the Program's technical assistance, through the Promoters, working in such a way that the communities feel true ownership and are making informed decisions with regard to their projects? The evaluation will investigate the functioning of the Associations and the extent to which the members of the community have been involved in project design, tariff decisions and construction. (iii) Is the fact that the communities are reimbursing the cost of the construction of the projects a factor in determining their sense of ownership, their discipline in paying tariffs and, therefore, the long-term sustainability of individual projects? (iv) Are households being excluded because they are not able to pay the tariffs? (v) Is the internal social control of the communities supported by the work of the

Promoters, sufficient to guarantee reimbursement to the trust fund? (vi) Are the incentives for the Program Manager and the Promoters properly aligned to promote the Program's objectives and is the non-reimbursable part of the funding being properly allocated as set out in the Operating Regulations?

- 3.50 In addition to the above, the firm undertaking the technical evaluation will analyze quantitatively the extent to which the Program objectives have been attained as measured by the indicators given in Table 5. The firm will review the general advance of the Program to make sure that: (i) all of the criteria and rules for eligibility and the approval of projects for funding are being respected; (ii) procedures for disbursements are being followed; (iii) funds are flowing to the beneficiaries efficiently; (iv) the physical works are constructed to adequate standards; and (v) from the time when 30% of the loan resources have been disbursed, the benchmarks for financial sustainability established in Table III-2 are being met. The technical evaluations will be funded by the Program.
- 3.51 INFOM will contract an independent consultant to undertake a comprehensive ex-post evaluation of the Program two years after the final project is put into operation. The consultant will study a sample of 5% of the projects completed under the Program and review all documentation to determine to what extent the Program's objectives have been met. The consultant will attempt to answer the same five questions covered by the technical evaluations (see paragraph 3.49). INFOM will utilize resources from the trust fund to pay for the ex-post evaluation.
- 3.52 INFOM will submit reports on the progress of the Program every six months in accordance with IDB procedures.
- 3.53 The IDB project team has determined the following milestones for special review with INFOM and the Program Manager to ensure the Program is being implemented as envisaged: (i) as soon as twenty communities have entered Phase 1 of the Project Cycle; (ii) as soon as twenty Associations have signed funding agreements with the Fiduciary Bank and have entered Phase 2 of the project cycle, and (iii) when the first twenty completed projects have been operating for twelve months. INFOM will invite the IDB project team, the Ministry of Finance, the Program Manager to meet within one month of reaching those milestones to review the Program.

P. Program launch workshop

- 3.54 INFOM, the Program Manager, and the IDB project team will participate in a workshop to initiate implementation within two months of the Program Manager being contracted. The workshop will review Program objectives, performance indicators and details of Program design.

Q. Procurement of goods and services

- 3.55 The procurement of goods and services and the contracting of civil works will be subject to the IDB's procurement procedures and policies. International public bidding will be required: (i) for the acquisition of goods and related services when the value is equal to, or exceeds, US\$250,000; (ii) for the construction of civil works when the value is equal

to, or exceeds, US\$1.5 million, and (iii) for consultancy services when the value is equal to, or exceeds, US\$200,000. The Fiduciary Bank, Publicist and Promoters will be hired by national competitive bidding as the nature of the work means that it is appropriate to use local companies. The Program Manager will be hired by international competitive bidding. All bidding for contracts below these limits will follow national legislation when its provisions do not contravene the IDB's procurement procedures and policy.

R. Conditions precedent to first disbursement

- 3.56 With the exception noted in Paragraph 3.57, the IDB will only start disbursements under the loan when three conditions have been met: (i) the Borrower must have entered into a subsidiary agreement with INFOM relating to the execution of the Program, the text of which must be agreed with the IDB; (ii) the Ministry of Finance must have contracted the Fiduciary Bank, entered into a trust fund agreement with the Fiduciary Bank and formed the Fiduciary Committee; and (iii) INFOM must have put the Operating Regulations into operation.

S. Special disbursement to initiate Program

- 3.57 The IDB may allow the disbursement of up to US\$500,000 prior to compliance with the special conditions precedent to first disbursement, to enable INFOM to contract the Fiduciary Bank and the Program Manager, as long as the conditions established in the General Conditions of the loan contract between the Government of Guatemala and the IDB have been satisfied.

IV. VIABILITY AND RISKS

- 4.1 The IDB project team has based its assessment of the viability of the Program on the following: (i) project design is commensurate with the technical and financial capacity of the communities; (ii) the institutional design is based on the legal mandates of the various participants, their technical capacity to fulfill their roles and a contractual framework of technical support to counteract weaknesses in technical capacity; (iii) the economic benefits of each Project are not only positive, but are seen to be positive by the communities; and (iv) the trust fund maintains a positive cash balance. Many successful community-based rural water projects operate in Guatemala, and the PAYSA and *Génesis Empresarial* projects show that schemes where communities repay funds received can be successful. Unfortunately, there is no database that gives the information necessary for a rigorous analysis of a sample of projects similar to those to be implemented under the Program. The project team has based its analysis on a range of possible projects, incorporating practices well known in Guatemala, and comparing them with the socio-economic situation in the communities and their ability to pay the cost of operating the services in a sustainable way.
- 4.2 The Program was conceived to increase coverage of potable water and sanitation in rural areas. The Program should meet its purpose in terms of coverage simply by providing the technical assistance and disbursing the funds for the construction of the water projects. However, to multiply the effect of the Program based on what was learned from the PAYSA and *Génesis Empresarial* operations, INFOM has devised a financial mechanism whereby the funds are distributed to the communities through a revolving fund for investment in rural water projects established as a trust fund in a commercial bank. The Associations that benefit will replenish the trust fund, so that it can fund additional projects in the future. The trust fund is an instrument commonly used for such purposes in Guatemala. The Program pulls together in a single model the good practice learned from various projects and represents a significant step towards sector sustainability for INFOM. The Program is not conceived as a credit program because the funds are transferred from the central government for the express purpose of financing rural water projects. The Program does not make funds available to the financial sector for on-lending and credit is not a criterion for selecting the communities. However, the Program seeks to incorporate some of the relevant best practices of a credit program, especially to reduce the risk of non-reimbursement by the communities. (See paragraph 4.20)

A. Technical considerations

- 4.3 All of the technical solutions commonly practiced for rural projects in Guatemala could be included in the Program. The Program will fund raw water abstraction facilities that include boreholes with electric pumps, protected springs and river abstraction. With the exception of river sources, the raw water requires only disinfection to make it potable and the Program will pay for simple chlorination facilities. When the source is a river, and a treatment plant is required, the Program will support it only when the Promoter certifies that the community has the technical and financial capacity to make sure that it is correctly operated. The Program will only fund projects with domestic connections. The Program requires that any project that requires electrical pumping also include metering

of household connections. The Program will support latrines constructed as far as possible from local materials.

- 4.4 Technical feasibility is based on the assumption that the communities, with the help of the Promoters, will choose appropriate solutions. Even a modest water and sanitation project may lead to a worthwhile increase in the well-being of many rural communities and the Program will support any technically-sound solution as long as it delivers at least 40L/person/day of drinking water and provides for the safe disposal of wastewater.
- 4.5 During the first year of the Program, INFOM will contract a consultant to review and update their construction standards to make sure that they are compatible with the Program.

B. Institutional viability

- 4.6 INFOM has a legal mandate to undertake projects in rural water and sanitation. In its approach to the sector, INFOM has begun a transition to an institution with a more strategic role, responsible for the policy and planning of the sector, facilitating and coordinating support to communities and other relevant actors, and for promoting and disseminating best practices. The Program will be totally in line with this new approach as communities will be responsible for the execution of their own projects, while INFOM provides support through the work of the Promoters. As a result, INFOM intends to apply the methodologies and procedures developed in the Program to all future projects in the sector regardless the source of funding.
- 4.7 Contracting a Program Manager to plan and control the Program is consistent with INFOM's new role and will strengthen its capacity to act as the Executing Agency for the Program. The Program Manager will handle the day to day activities relating to the control of the Program working with INFOM professionals in the coordinating unit.
- 4.8 Contracting a commercial bank to handle the Program funds will ensure efficient allocation of resources according to the Program requirements, high levels of transparency and accountability, proper accounting and reporting of all transactions, including those performed at the local level by the Associations. As it has been designated by law for such purposes, the Ministry of Finance will hire the commercial bank and will establish the trust fund. The Ministry of Finance has established several trust funds in the past and has a unit dedicated to their administration. The main requirements for hiring the bank will be geographical presence, highly developed accounting and reporting systems, and experience in handling small loans in rural areas. At least five commercial banks have been identified as potential candidates (*Banrural*, *Bancafé*, *Banco Agro-Mercantil*, *Banco Occidente* and *Banco de Crédito Hipotecario Nacional*). The foundation *Génesis Empresarial* intends to split with one half joining with a small bank, *Bancosol*, and other partners. The resulting bank will have the benefit of *Génesis Empresarial*'s network of branches in the country areas, and could form an additional competitor. Under certain circumstances, *Génesis Empresarial* would be prepared to take on the repayment risk of the communities, the only financial institution in Guatemala prepared to do so. However, as it would only have the capacity to take the

risk on a small part of the Program, up to a total of US\$2 million a year, it would not be feasible to base the Program on a loan through the financial sector. The terms of reference for the selection of the Fiduciary Bank and the model contract to establish the trust fund have been prepared and are part of the Operating Regulations.

- 4.9 The project team consulted a formal Directory of NGOs of Guatemala published in 2002 to determine the capacity of potential Promoters. There are over 400 NGOs working in Guatemala, over 100 of which have worked on water and sanitation projects in the last few years, 90% of them on rural projects. These NGOs work throughout the country and cover all regions. All of the NGOs are formally incorporated, but vary in size, structure and in the projects they undertake. Most of the NGOs that work in water and sanitation also work in other, community related areas. There are many consultants, companies, or individuals, with expertise in rural water and sanitation that could be contracted as Promoters.
- 4.10 Each community will create an Association with the legal capacity to enter into the funding agreement with the Fiduciary Bank and the contracts necessary to construct their project. The creation of an Association is a relatively rapid and straightforward process of registration with the municipal authorities. The Program will call for over 85% of the families in a community to participate in the Association to make sure that it is truly representative. The Associations will be the owners of the Projects.
- 4.11 Given that the provision of water and sanitation services will be done under the form of “*auto abastecimiento*”, it is considered a private service and regulated under the Civil Code.

C. Socioeconomic viability

- 4.12 The socio-economic viability of the Program is demonstrated by: (i) an analysis of the expected costs and benefits of typical projects; (ii) an analysis of the Program as a whole based on a likely mix of projects, and (iii) a methodology for ensuring the socio-economic viability of projects before they are approved for funding.
- 4.13 Without a project, families face high costs because of the inconvenience of fetching the water and then boiling it. Consequently, families consume small quantities of water. Prior to the project, a typical family collects 50L/day of water (approximately 8L/person/day), the mother and two children traveling to a water source 0.5km from the house, twice a day. The daily economic cost of this journey is assessed at Q3.28 or Q66/m³ of water (US\$0.41 or US\$8.2/m³ of water). With a project, water consumption will increase to 240L/day for a typical household. Assuming a constant elasticity of demand, consumption benefits represented by the gain in consumer surplus have been calculated. The benefits perceived by increasing water consumption plus the saving in not having to fetch water, estimated to be Q2,145/year, are compared against the investment and operating costs of a project comprising a protected spring, distribution by gravity and latrines as well as a project comprising a borehole, distribution by pumping, and latrines, as the least and most expensive likely solutions. The analysis, summarized in Table IV-1, shows the large benefits typical of rural water and sanitation projects. This comparison is

conservative because it does not include individual and community-wide benefits from improved sanitary conditions.

Table IV-1: Costs and benefits per household for least expensive and most expensive solutions							
	Consumption (L/person/day)	Community contribution* (Q)	Contribution from INFOM (Q)	Total investment (Q)	Operating costs (Q/year)	Total costs (Q/year)	Benefit (Q/year)
Spring with household connections, latrines	40	470	1,687	2,157	77	334	2,145
Borehole with electric pump, household connections, latrines	40	193	4,015	4,209	250	862	2,145

* Poor communities are likely to choose to contribute more in terms of manual labor and materials than richer communities. The sum of Q470 for the least expensive solutions includes contributions for latrines and potable water. The sum of Q193 for the most expensive solutions corresponds with a labor contribution for latrines only.

- 4.14 To assess the feasibility and scope of the entire Program, all costs have been considered, including the costs associated with the Program Manager, Publicist, Promoters, the administration of the trust fund and the consultancies contracted by INFOM. These have been added to the construction costs and the operating costs for a likely mix of projects (see Table IV-2). Given this distribution of projects, the Program would provide services to 600,000 people, 100,000 more than the indicator for success in meeting the Program's purpose, and yield a 41% Internal Rate of Return for net socio-economic benefits.

Table IV-2: Expected Results		
Projects (all have latrines)	Families per project	Expected distribution of projects
River intake, household connections	100	32%
Spring, household connections	200	16%
Borehole with electrical pump, household connections	200	52%
TOTAL		100%
Number of beneficiaries		606,000
Number of families		101,000
Number of projects		666
Socio-economic Internal Rate of Return		41%

- 4.15 For an Association's application to be approved, the relevant Promoter must present evidence that a community has selected an appropriate project and that it understands and accepts the tariffs that will be charged. This demonstrates that the community perceives that the direct benefits of the project they have selected exceed the corresponding total costs. The Program thus incorporates a mechanism for ensuring the socio-economic feasibility of the project: community participation in the design of the project, selection of a technical solution based on their perception of the benefits and their agreement to pay a tariff that covers the operating cost and reimbursement to the trust fund.

D. Financial considerations

- 4.16 The financial viability of the Program has been assessed by: (i) comparing the direct and indirect costs with other IDB projects in Guatemala; (ii) considering the financial viability of individual projects, and (iii) analyzing the viability of the trust fund.
- 4.17 The estimated cost for the Program given in Table 1 has been built up in detail from unit costs. This estimate is available in the Program's Technical Files. The total Program cost of US\$55.6 million is equivalent to US\$92 for each beneficiary. Previous IDB loans to Guatemala for rural water and sanitation projects have had values ranging from US\$140 (the most recent loan, 836/SF-GU) to US\$356. A loan recently approved for rural water projects in Paraguay had a value of US\$160/beneficiary. Direct constructions costs equal to 70% of the Program value is reasonable for rural water projects, the same as projects implemented by CARE in Guatemala. The estimated cost of the Program Manager is approximately the same as the costs of project management for a similar project in Honduras.
- 4.18 The Promoter will calculate and certify tariffs that cover all of the project costs, including operating costs, a maintenance fund to provide the Association with a cushion to cover emergency repairs and reimbursement to the trust fund. This will ensure that the project is sustainable in the long run. The communities will select a Project based on their willingness to pay that tariff, ensuring that it is financial feasible. The Promoter will make sure that a community does not select a Project that is too expensive, putting an excessive financial strain on the families. The Associations will adjust tariffs to maintain the value of the income against inflation.
- 4.19 A broad range of projects has been analyzed. A project comprising a protected spring, simple, gravity-fed distribution and latrines is the most affordable with a cost of Q28/household/month (US\$3.47/household/month); a project comprising a deep borehole, electric pumping, metered household connections and latrines is the most expensive, with a typical cost of Q72/household/month (US\$8.90/household/month). The National Survey of Family Income and Expenses (1999) and the SAS give information that can be used to deduce the capacity of rural families to pay for water and sanitation services, based on 3% of household income. 75% of communities have an average capacity to pay Q52/household/month and will have a selection of projects from which they could choose.
- 4.20 The risk of an Association not reimbursing the trust fund is managed in a number of ways: (i) before entering into a funding agreement with the Fiduciary Bank, the members of each Association will commit to be jointly and severally liable for reimbursement; (ii) for services in managing the funds recovered from the community, the treasurer of each Association will receive a payment based the amount reimbursed to the trust fund; (iii) Associations will be charged a penalty for late reimbursement of the trust fund; (iv) the Promoters will provide support for the Associations during the first twelve months of operation, and therefore the first twelve months of reimbursement; (v) the Fiduciary Bank's remuneration will be based, in part, on the reimbursements; (vi) Associations will not have access to their maintenance fund if they are not up to date

with reimbursements, and (vii) Associations will not be eligible for further projects if they are not up to date with reimbursements.

- 4.21 A cash-flow model for the trust fund has been drawn up based on the disbursement of construction costs of US\$0.6 million from the IDB loan in the first year, US\$8.3 million in the second year and US\$15.5 and US\$14.4 million in the third and fourth respectively. The cash-flow has been analyzed for the life of the IDB loan based on a conservative estimate of reimbursements from the Associations.
- 4.22 The trust fund has been analyzed for twenty-five years, after which it will still be sufficiently liquid to continue to contract the services of a Program Manager and Promoters, and fund additional projects. If the authorities wish to continue to use the mechanism indefinitely, they will have to make future contributions to the trust fund equivalent to the cost of the Program Manager, the Promoters and the non-reimbursable payments to the communities.

E. Environmental and social impact

- 4.23 All projects will include adequate means for the disposal of wastewater resulting from increased potable water supply. The projects will have some environmental impact, but except in the case of surface water abstraction works, this will probably be small. Construction of the works may cause some temporary environmental impact. To qualify for funding under the Program, each project must: (i) must be shown to be environmentally feasible, and (ii) have an environmental brief, outlining likely impact, mitigation methods and further studies required during implementation. The construction contracts will include the obligation of the constructor to undertake any environmental studies required by law and to implement any mitigation measures required.
- 4.24 INFOM has consulted with potential beneficiaries and other stakeholders, such as NGOs and agencies funding rural water projects, during the design of the Program. The Program has received positive comment, a finding confirmed by the IDB project team, which has interviewed agencies and visited several rural communities. This is important given INFOM's wish to harmonize the way rural water projects are implemented. However, the real social viability of the Program is based on community participation in the design of the individual projects supported by the Program.
- 4.25 The work of the Promoters during Phase 1, community organization and project development, will include environmental and health education. The Promoters will stress the importance of environmental protection in guaranteeing a secure raw water source. Where works, or other activities, such as replanting a water catchment area, might be necessary to protect the water source, these can be included in the project.
- 4.26 The Program will have a positive social benefit including health and quality of life gains such as reduced time carrying water from remote sources. Benefits relating to community participation in the development and ownership of Projects are less tangible, but real, and will lead to increased sustainability.

- 4.27 The Program includes specific provisions for including women as active participants in management to ensure better water and sanitation services. The Program requires that the education campaign during Phase 1 of the Project Cycle specifically incorporates women so that they benefit as much as the men. The CABILICA study showed the positive role that is played by women when they are involved and, in common with good practice now being adopted, the Program requires that at least 2 women are present as members of the Board of each Association.

F. Beneficiaries

- 4.28 The Program will benefit a minimum of 500,000 rural inhabitants. The total number of beneficiaries will depend on the projects chosen by the communities and a likely mix of projects studied during analysis indicates that there may be up to 600,000 beneficiaries. The benefits accrue principally as a health benefit resulting from safe drinking water and time saved in not having to travel long distances to fetch water. If the trust fund works as envisaged, the number of beneficiaries will more than double.
- 4.29 As the trust fund is designed to recover funds from the Associations, funds will be available for additional projects in the future, indirectly benefiting many more people.

G. Poverty impact

- 4.30 The Program qualifies as a Poverty Targeted Investment (PTI) under the geographic criteria (document GN-1964-3). The Program will benefit rural households whose average annual income per capita (Q2070) is well below the national average of Q3221 a year. There is a 62.1% incidence of poverty among the rural population, against a 27.7% incidence among the urban population. Furthermore, the Program will focus on households without access to formal potable water services, and according to national data, 56% of those without such access are concentrated in the two lowest income quintiles.

H. Public Utilities Policy

- 4.31 The design of the Program is compatible with the objectives of the IDB's Public Utilities Policy. (i) It is designed specifically to ensure the long-term sustainability of the services, by community participation, and the payment of tariffs to cover all costs. Each community will have a maintenance fund to cover the cost of unscheduled, expensive repairs (see paragraph 4.18); (ii) economic efficiency is achieved because the communities themselves make decisions between competing projects, with different costs (see paragraph 4.14); (iii) quality will be safeguarded by the Promoters, who will be involved with each project for twelve months after it is put into service, to make sure that it is operated satisfactorily (see paragraphs 4.3 to 4.5); (iv) the Program will be publicized nationwide to make sure that no communities that want to participate are excluded. Access to the Program will be offered first to those communities that do not have a water and sanitation system (see paragraph 3.13); and (v) the Program will comply with the country's environmental rules and regulations (see paragraphs 4.23 to 4.27). The authorities have an agenda for reform that incorporates the basic conditions for the sector

that are covered in the Public Utilities Policy. Specifically relating to rural water projects, the legal framework is adequate in that it allows the communities to own and operate their projects and charge appropriate tariffs (see paragraph 4.11). The Program promotes a corporate structure for the Associations that is appropriate for operating rural water projects.

I. Risks

- 4.32 The main risk to the Program is INFOM's weak capacity to implement projects. To mitigate this risk, INFOM will contract the Program Manager with the executive authority for the planning, control and coordinating necessary to complete the Program on time. Although the Program Manager will control the multiple activities once the Program is underway, the timely commencement of the Program will still be dependent on INFOM as the executing agency with responsibility for contracting the Program Manager, Publicist and Promoters. To minimize this risk of delay because of INFOM's lack of capacity to contract these companies, the management of INFOM will commence the process of procurement immediately. INFOM has agreed to contract a consultant to help with this process and the project team proposes that INFOM's costs related to these activities be recognized, retroactively, as counterpart contribution.
- 4.33 The lack of long-term technical support for communities and their Associations may be seen as a risk to the sustainability of the projects. Unfortunately, although such a facility is being considered as part of the sector reform, thinking of establishing a country-wide network to provide this assistance, even in the medium term, is impractical. The Program mitigates this risk in two ways: (i) the Promoter continues to work with the community for twelve months after the project has been put into operation. The Promoter will give the Association all of the support necessary to make sure that the project is being administered and operated correctly, and (ii) the Associations will charge tariffs that include a sum for creating a maintenance fund, which will be kept in the Association's account at the Fiduciary Bank, and drawn down as needed to cope with large, unscheduled repairs.
- 4.34 The Program will be subject to certain political risks, as Presidential elections will take place at the end of 2003 and a new administration will take office in early 2004. This may lead to changes in the management of government institutions, including INFOM, but given the important role of rural water supply in the country's poverty reduction strategy, and non-controversial nature of a program dedicated to meet this basic need, the risk that an incoming administration would not continue to support the Program is low. Management changes in the executing agency would be likely to have a negative impact on the pace of the Program's implementation, but the proposed execution scheme based on services contracts with the private sector (a Program Manager and a Fiduciary Bank) would minimize the risk to implementation.

**RURAL WATER INVESTMENT PROGRAM
(GU-0150)
LOGICAL FRAMEWORK**

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL: Better living conditions for Guatemala's rural population.	Incidence rates of gastrointestinal illnesses fall in rural areas 10 years after the program to levels near those of neighboring countries.		
PURPOSE: Increase coverage of potable water and basic sanitation services in a way that ensures sustainability.	<p>A minimum of 500,000 people living in rural areas are served by potable water systems operated by community-based associations by the end of the program:</p> <ul style="list-style-type: none"> – gravity-fed systems distribute a minimum of 40 liters/person/day to household connections – pumping systems distribute a minimum of 40 liters/person/day to metered household connections. <p>Community-based associations charge the tariff set to cover system operating costs and maintenance, plus an amount to reimburse the trust fund.</p> <p>Community-based associations reimburse the trust fund in a timely manner.</p> <p>All people served by potable water systems also have sanitation services that meet program standards.</p>	<ol style="list-style-type: none"> 1. Semiannual progress reports. 2. Operational evaluations. 3. Technical evaluations. 	Better living conditions remain a priority for future administrations. Government spending on basic health, education, sanitation and other social needs remain at or above current levels as a percentage of GDP.
RESULTS: (COMPONENTS): <ol style="list-style-type: none"> 1. Construction of rural potable water and sanitation infrastructure. 2. Development of community-based associations. 	<ol style="list-style-type: none"> 1. A minimum of 600 community-based associations develop into legal entities by the end of the program: 100 by the end of year one, 250 more by the end of year two, and 250 more by the end of year three. 2. A minimum of 600 projects are built, in operation, and documented by the end of the program: 100 by the end of year two, 250 more by the end of year three, and 250 more by the end of the program. 	<ol style="list-style-type: none"> 1. Municipal records 2. Semiannual progress reports. 	<ol style="list-style-type: none"> 1. Government of Guatemala makes a policy of addressing rural water and sanitation needs. 2. Relevant authority approves proposals.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
3. Strengthening of the potable water sector.	Proposals completed for: (i) measuring the yield of small raw water sources; (ii) update of construction standards for projects; and (iii) sector information system comprising a database, registry of consultants, and data on supply and demand.	3. Proposals submitted to the relevant authority.	
ACTIVITIES: a. Publicity: a.1 Publicize the program. b. Promote the program: b.1 Receive and review applications from communities. b.2 Field visits for territorial coverage. b.3 Develop community-based associations and approve projects: <ul style="list-style-type: none"> – community organization – health education – project identification – assistance throughout the construction and the operation and maintenance phases – certification of loan applications c. Project construction: c.1 Develop potable water and sanitation projects. c.2 Approve loans for potable water and sanitation projects. c.3 Build potable water and sanitation projects.	Contract for publicity campaign, US\$400,000. Contract for promotional activities, US\$7.28 million. Finance construction of potable water and sanitation projects, US\$38.92 million.	1. Regular reports from Program Management Unit. 2. External audits of INFOM Design reports submitted and approved. Contracts entered into between community-based associations and construction firms. Applications submitted for project approval. Project supervision firms certify the quality of work done under the program. Field visit reports. Regular trust fund reports.	1. Guatemala's rural communities express interest in joining the program Before program activities can begin: 1. Government of Guatemala sets up the program trust fund. 2. INFOM, as executing agency, completes the bidding process to hire the Program Manager, Publicist, and the eight Regional Promoters.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>d. Institutional strengthening of INFOM:</p> <p>d.1 Set up SAS database.</p> <p>d.2 Update INFOM's construction standards.</p> <p>d.3 Prepare procedure for estimating the yield of small raw water sources.</p> <p>d.4 Set up registry of contractors and consultants.</p> <p>e. Program management</p>	<p>Contract for and execute institutional strengthening activities, US\$450,000.</p> <p>Program management responsibilities, US\$2.92 million</p>		

RURAL WATER INVESTMENT PROGRAM
(GU-0150)
PROCUREMENT PLAN

[illegible]